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Amendment
Attorney Docket No. S63.2N-11056-US03

REMARKS

This amendment is in response to the Office Action dated June 10, 2003 in which claims 61, 64, 65, and 68-82 have been rejected. Claims 83 and 84 have been withdrawn from consideration.

Informality

In the Office Action, the disclosure has been objected to because of an informality in claim 65. Applicant has amended the claim by inserting the comma, as recommended in the Office Action. This amendment does not narrow the scope of the claims.

Withdrawal of Claims

Newly submitted claims 83 and 84 have been withdrawn from consideration as being drawn to a non-elected species.

103(a) Rejection – Fontaine and Alfidi

Claims 61, 64, 65 and 68-82 are rejected under 35 USC 103(a) as being unpatentable over Fontaine (US 5370683) in light of Alfidi et al (US 3868956).

Claim 61 has been amended to recite that each of the holes of the stent is completely bounded by a plurality of interconnected struts and that each of the interconnections between the struts which bound a hole are of the same material as the struts.

Fontaine discloses a stent made from a wound wire. The patent discloses that the outside edges of U-shaped bends of the wire can be fastened together by any conventional means such as welding, brazing, soldering, or gluing. As such the interconnection between each of the struts bounding a hole are not made of the same material as the strut. Fontaine does not suggest that the stent be cut from a tube and Fontaine does not suggest that the interconnections be of the same material as the struts.

Even if, for the sake of argument, there were motivation to combine the Fontaine and Alfidi references, the combination of references does not disclose a stent where the interconnections between each of the struts bounding an opening are of the same material as the struts.

Claim 65 has also been amended to recite that interconnections between struts bounding a through-hole are of the same material as the struts. As discussed above, even if there were motivation to combine Fontaine and Alfidi, the combination would not disclose this element. Therefore, claim 65 and claims dependent therefrom are patentable over Fontaine in combination with Alfidi.

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Claim 69, dependent from claim 61 and claim 76, dependent from claim 65, have been amended to recite that, each of the serpentine bands is a continuous closed structure which extends about the circumference of the stent. Claim 69 and claim 76 and claims dependent therefrom are further patentable over the recited combination because this feature is not present in Fontaine. The Fontaine stent is in the form of a helical band. Alfidi is also helical and does not provide any suggestion to modify the Fontaine stent to provide closed, continuous serpentine bands which extend about the circumference of the stent.

Dependent claims 72-75 and 79-82 all recite the presence of a taper. The Office Action notes that Fontaine fails to teach a taper but does not point to any teaching in Alfidi of the desirability of providing a taper. The combination of Fontaine and Alfidi does not disclose a stent with a taper. As such, these claims are further patentable over the recited combination.

Claims 74-75 and 81-82 all include the recitation that the inner diameter of the stent is constant over the length of the stent and the outer diameter has a taper. This feature is further not disclosed in either of the cited references. If the Examiner considers that this feature is well known in the prior art, Applicant respectfully requests the Examiner to provide a citation to prior art which discloses this feature.

103(a) Rejection – Klein and Alfidi

Claims 61, 64, 65 and 68-82 are rejected under 35 USC 103(a) as being unpatentable over Klein (US 5593442) in light of Alfidi et al (US 3868956).

Claim 61 is directed to a stent formed from an open-ended tube from which material has been removed.

Assuming, for the sake of argument only, that there were motivation to make the proposed combination, the combination of references does not enable the provision of oval struts in a stent which has been formed from a tube from which material has been removed, as in claim 61 and claims dependent therefrom. Quite simply, there is no teaching in the combination of references as to how to shape the struts in a stent such as the Klein stent so that the struts will be oval.

Therefore, claim 61 and claims dependent therefrom are patentable over the combination of Klein and Alfidi.

Claim 65 is directed to a stent whose interconnections between struts bounding a through-hole are of the same material as the struts. Each of the struts has an oval cross-section.

Even if the proposed combination were made, it would not enable the recited

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stent. If the wire of Alfidi were used in the Klein stent, there would be welds or other adhesives to hold the wires together. This would not, however, meet the instant claim language which requires that the interconnections between struts bounding a through-hole are of the same material as the struts.

Therefore, claim 65 and claims dependent therefrom are patentable over the combination of Klein and Alfidi.

Furthermore, dependent claims 72-75 and 79-82 all recite the presence of a taper. This feature is not disclosed or suggested in either Klein or Alfidi. As such, these claims are further patentable over the recited combination.

Claims 74-75 and 81-82 all include the recitation that the inner diameter of the stent is constant over the length of the stent and the outer diameter has a taper. This feature is further not disclosed in either of the cited references. If the Examiner considers that this feature is well known in the prior art, Applicant respectfully requests the Examiner to provide a citation to prior art which discloses this feature.

102(b) Rejection - Alfidi

Claims 61, 64, 65, 68-70, 76 and 77 are rejected under 35 USC 102(b) as being anticipated by Alfidi et al.

Claim 61 includes the limitations that each of the holes in the wall of the stent is completely bounded by a plurality of interconnected struts. Also, each of the struts have a cross-section of oval shape with a short diameter corresponding substantially to the thickness of the wall so that the long sides of the oval lie at the outside and the inside of the tube wall at the respective strut. These limitations are not met.

First, the openings in the Alfidi stent are not bound by **interconnected** struts. It is not clear from the Alfidi disclosure whether the longitudinal wire of Alfidi actually touches the turns of the Alfidi coil to completely bound an opening. Even if it did, contact alone between the longitudinal wire and the turns does not result in interconnected struts.

Second, assuming, for the sake of argument only, contact between the longitudinal wire and the turns of the Alfidi stent, the wall thickness of the stent in the region of contact would be at least twice the short dimension of the oval cross-section of the wire. This is contrary to the recitation of the claim that the short dimension corresponds substantially to the wall thickness of the stent.

Claim 65 includes the recitation that each of the through-holes is bounded

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completely by struts with interconnections between struts bounding a through-hole being of the same material as the struts. Also, each of said struts has an oval cross-section with a short diameter corresponding substantially to the thickness of the wall.

Claim 65 is patentable over Alfidi for the same reasons as discussed above with respect to claim 61.

Dependent claims 64, 68-70, 76 and 77 are patentable over Alfidi for at least the same reasons as claims 61 and 65.

CONCLUSION

Applicant believes that the application is in condition for allowance and requests withdrawal of the objection and rejections and notice of the allowance of the pending claims.

Respectfully submitted,

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